

Highlights of National and International IPY Activities

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Polar Research Board of the
National Academies

U.S. National Committee for
International Polar Year (IPY) 2007-2008



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IPY Concept

IPY 2007-2008 will be an intense, internationally coordinated campaign of polar observations, research and analysis that will advance understanding of physical and social processes in polar regions, examine their globally-connected role in the climate system, and establish research infrastructure for the future.

IPY will galvanize new and innovative observations and research while building on and enhancing existing initiatives.



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History of the “International Year” Concept

- 1882-1883: 1st IPY, 11 nations, first coordinated international science
- 1932-1933: 2nd IPY, 40 nations, meteorology, magnetism, radio science
- 1957-1958: 3rd IPY (Internat’l Geophysical Year) 67 nations, geosciences, WWII technologies
- 2007-2008: 4th IPY, 63 nations, broad interdisciplinary focus, emphasis on environmental change. Includes social science.



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Evolution of IPY 2007-2008

Why an IPY? Who-What-When-Where-How?

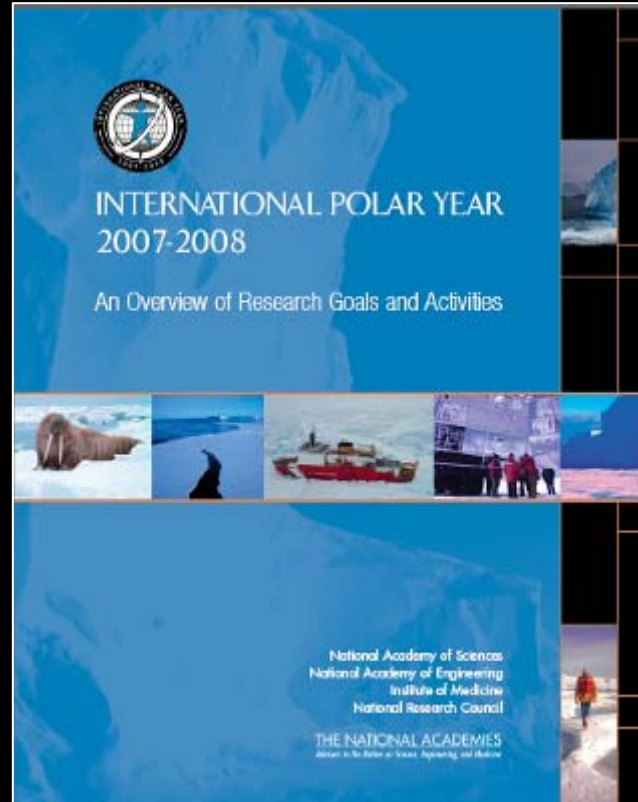
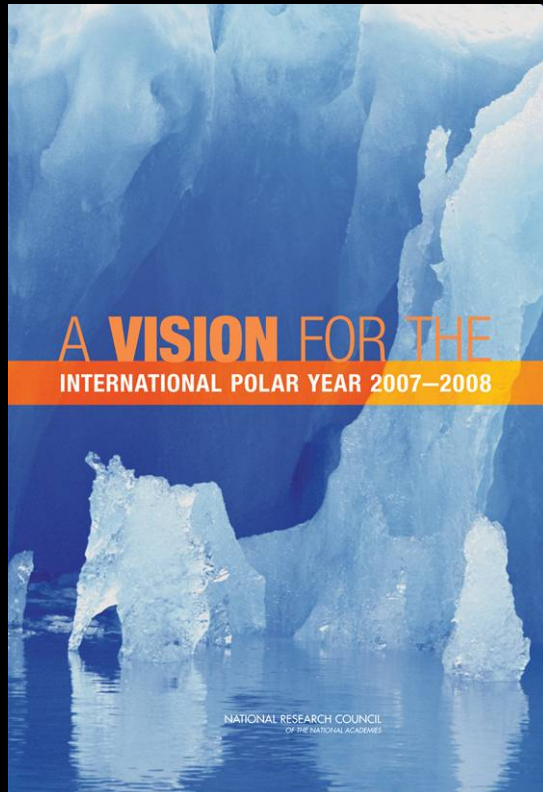
- 2002-2003: Early, scattered discussions
- 2003: US National Committee for IPY formed
- 2003: ICSU forms first IPY Planning Group
- 2005: ICSU-WMO form Joint Committee
- 2006-2009: ICSU-WMO Joint Committee as key international group (IPY Programme Office)
- 2006-2009: Many national planning activities



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U.S. National Committee for IPY



www.us-ipy.org

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IPY Research Themes

- **Status:** determine present environmental status of the polar regions
- **Change:** quantify/understand past & present environmental & social change and project future change
- **Global Linkages:** advance understanding on all scales of links and interactions between poles & the global system
- **New Frontiers:** investigate the frontiers of science in the polar regions
- **Vantage Point:** use unique vantage point of poles to enhance observations (from interior to Sun)
- **Human Dimensions:** investigate cultural, historical, and social processes that shape circumpolar societies



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What Makes Something Part of IPY?

1. Advances within one or more IPY themes
2. Involves at least one pole and begins in timeframe
3. International collaboration
4. Viable management plan and organisational structure
5. Funding
6. Viable plan for logistical support
7. Supports principles of IPY data management
8. Includes education, outreach and communication activities
9. Helps engage the next generation of polar researchers
10. Provides opportunities for lasting legacies
11. Builds on existing plans and initiatives (or doesn't conflict!)
12. Has interdisciplinary elements



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U.S. Opening Ceremony for IPY

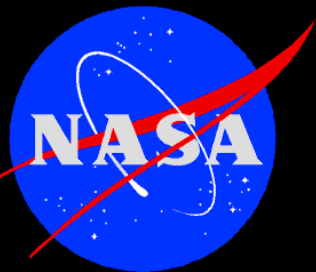
February 26, 2007

National Academy of Sciences Building
Washington, DC



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A Sampling of IPY Projects



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A Sampling of IPY Projects



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IPY Success = Lasting Legacies

- Permanent observation and monitoring networks
- Long-term management of and access to the explosion of data that IPY will create
- Raising the public profile of the polar regions
- Training the next generation of polar researchers
- Sharing logistical information more broadly and more efficiently
- Coordination of funding
- Increasing the capacity of Arctic residents to support and engage in research activities
- Improving the links between observation/monitoring and modeling



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